



COSMOS

California State Summer School for Mathematics and Science

UC Santa Cruz • UC Davis • UC Irvine • UC San Diego

COSMOS is a four-week residential program for talented and motivated students completing grades 8-12. Students work side-by-side with outstanding university researchers and faculty exploring advanced topics beyond the typical high school curriculum in science, technology, engineering and mathematics (STEM) fields. COSMOS courses are hands-on and lab intensive focusing on current research underway at the University of California.

2012 DATES

UCD/UCSD/UCSC
UCI

July 8 - August 4

June 24 - July 21

FEES

\$30 Application Fee (non-refundable)

\$2,810 Tuition Fee* (includes room & board)

Full and partial financial assistance is available for tuition. Students who qualify for free/reduced lunch by The National School Lunch Program will automatically qualify to receive full financial assistance, based on verification requirements and availability of funding. Students not receiving free/reduced lunch will be evaluated for financial assistance based on family size and income.

*Non-California students pay the out of state fee of \$6,500 and are not eligible for financial assistance.

www.ucop.edu/cosmos



“Not only was I taught by well-respected professors and the finest scientists in their fields, but I was surrounded by other self-motivated students that are also working hard to achieve what they want in life.”

-COSMOS Alumnus

WEBSITES

Statewide

UC Davis

UC Irvine

UC San Diego

UC Santa Cruz

www.ucop.edu/cosmos

www.cosmos.ucdavis.edu

www.cosmos.uci.edu

www.cosmos.ucsd.edu

epc.ucsc.edu/cosmos



ACADEMICS

We offer a variety of academic clusters that consist of two science and/or math courses, and a science communication course. Courses are taught by active faculty and researchers. Students participate in hands-on labs, field activities, lectures, and discussions. Students also work on a related research project. Cluster sizes vary from 18-24 students and the student to academic staff ratio is typically 5:1. COSMOS is an academic enrichment program and is not meant to replace a yearlong high school course; therefore we do not grant high school or college academic credit.

RESIDENTIAL

Students are required to live on campus for the duration of the program. Living on campus allows students ample opportunities to form lasting friendships with like-minded peers who share the same interests in mathematics and science. On weekends, students may attend additional recreational field trips.



APPLICATION

Each campus can only accommodate approximately 160 participants so selection is competitive. A typical COSMOS student has a GPA of 3.5 or above. Students must have achieved academic excellence. Priority will be given to 9th-11th graders. The application will be available online February 1st. The following factors are taken into consideration:

- Grades, especially in Math and Science courses
- Math/Science teacher recommendations
- Participation in Math/Science activities
- Responses to short-response questions

EXAMPLE OF CLUSTERS OFFERED

CLUSTERS LISTED BELOW WERE OFFERED IN THE SUMMER OF 2011 AND ARE SUBJECT TO CHANGE. PLEASE REFER TO THE INDIVIDUAL CAMPUS WEBSITES FOR UPDATED CLUSTER OFFERINGS FOR THE SUMMER OF 2012.

UC DAVIS

- Biotechnology □
- Physics in Electro-optics & Nuclear Technology ✕▲
- Intro to Engineering Mechanics ◆▲
- Anatomy of Global Climate Change
- Computers in Biophysics & Robotics
- Mathematics ✕
- Biomedical Sciences
- The Chemistry of Life ✕*
- Introduction to Astrophysics ✕

UC SANTA CRUZ

- Logic, Cryptography & Number Theory *
- Nanochemistry ✕*
- Marine Mammal Biology and Ecology □
- Chemistry & Environmental Toxicology *
- Video Game Design ✕
- Everyday Chemistry & Mathematics ✕*
- Astronomy & Physics ○
- Oceanography

UC IRVINE

- Robots to Rockets ✕▲
- Astronomy & Astrophysics ○
- Tissue/Tumor Biology & Mathematical/Computer ✕ Modeling ✕*
- California Coastal Ecosystems
- Mobile Digital Media
- Biomedical Sciences □
- The World of Molecules ✕

UC SAN DIEGO

- Computers in Everyday Life ✕*
- Engineering Design & Control of Kinetic Sculptures +
- Living Oceans & Global Climate Change ✕*
- Earthquakes in Action ✕
- Bright Ideas: Light at Work ▲
- Exploring the Cosmos ✕◆
- Biological Motivations for Tensegrity Structures □
- Molecular Biology Revolution □

Prerequisite(s):

- | | | | |
|------------|----------------|-------------|-----------|
| + Algebra | ✕ Algebra II | □ Biology | ▲ Physics |
| ○ Geometry | ◆ Trigonometry | ★ Chemistry | * Other |

